Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (Currently Amended) A method of controlling the order of processing packets, the method comprising:

receiving packets from a network;

identifying a property for at least one of the packets;

associating a priority level based on the property with the at least one packet;

attaching a packet description for the priority level to the at least one packet;

inserting the at least one packet into a first queue; and

processing the at least one packet in an order based, at least in part, on the priority level.

2.   (Original) The method of claim 1, further including:

associating a priority level with at least a second packet;

inserting the at least second packet into a second queue; and

Application No. 9/891,574

Response to Office Action of December 15, 2004

Atty. Docket No. 042390.P11397
Examiner Chang, Richard
TC/A.U. 2663

processing the at least second packet in an order based, at least in part, on

the priority level of the at least second packet.

3.   (Currently Amended) The method of claim 1, ~~further including attaching a packet~~

~~description for the priority level to the at least one packet and the~~ wherein

inserting into the first queue includes packets having different priority levels.

4.   (Original) The method of claim 3, further including reading the packet

descriptions for the packets in the queue and determining the order for processing

based, at least in part, on the packet description.

5.   (Original) The method of claim 1, wherein the at least one packet has a pre-

designated priority value and the associating of the priority level includes

disregarding the pre-designated priority value.

6.   (Original) The method of claim 1, wherein the at least one packet has more than

one property with different priority values and the priority level is a select one of

the priority values.

7.   (Original) The method of claim 1, wherein the at least one packet has more than

one property with priority values and the priority level includes the sum of at least

some of the priority values.

8.   (Original) The method of claim 1, wherein the property is an acknowledgment

packet.

9.   (Original) The method of claim 8, wherein the identifying of the property is by

determining the packet size.

10.   (Original) The method of claim 8, wherein the acknowledgment packet is

processed prior to the processing of other packets received.

11.   (Original) The method of claim 1, performed by a final destination receiver

station on the network.

12.   (Currently Amended) A receiver station to control the order of processing

packets, comprising:

a)   an input port to receive packets from a network;

b)   a controller to identify a property for at least one of the packets and

      to associate a priority level based on the property with the at least

      one packet <u>and further to attach a packet description for the</u>

      <u>priority level to the at least one packet and to insert packets having</u>

      <u>different priority levels into the same queue</u>;

c)   at least a first queue to accept the at least one packet; and

d)   a processing unit to process the at least one packet in an order

      based, at least in part, on the priority level for the at least one

      packet.

13.   (Original) The receiver station of claim 12, wherein the controller is further to

      identify a different property for at least a second packet, to associate a priority

      level with the at least second packet, and to insert the at least second packet into a

      second queue for the priority level of the at least second packet.

14.   (Cancelled) The receiver station of claim 12, wherein the controller is further to

      attach a packet description for the priority level to the at least one packet and to

      insert packets having different priority levels into the same queue.

Application No. 9/891,574

Response to Office Action of December 15, 2004

Atty. Docket No. 042390.P11397
Examiner Chang, Richard
TC/A.U. 2663

15.   (Original) The receiver station of claim 12, further including a driver to further

read the packet descriptions for the packets in the queue and to determine the

order of the packets.

16.   (Original) The receiver station of claim 12, wherein the at least one packet has a

pre-designated priority value and wherein the controller is to associate the priority

level by disregarding the pre-designated priority value.

17.   (Original) The receiver station of claim 12, wherein the at least one packet has

more than one property with different priority values and the priority level is a

select one of the priority values.

18.   (Original) The receiver station of claim 12, wherein the at least one packet has

more than one property with priority values and the priority level includes the

sum of at least two of the priority values.

19.   (Original) The receiver station of claim 12, wherein the property is an

acknowledgment packet.

Application No. 9/891,574

Response to Office Action of December 15, 2004

Atty. Docket No. 042390.P11397
Examiner Chang, Richard
TC/A.U. 2663

20.   (Original) The receiver station of claim 19, wherein the controller is to identify

the property by determining the packet size.

21.   (Original) The receiver station of claim 19, wherein the processing unit is to

process the acknowledgment packet before processing the other packets received.

22.   (Original) The receiver station of claim 12, wherein the receiver station is the

final destination for the packet.

23.   (Currently Amended) A computer accessible medium having stored therein a

plurality of sequences of executable instructions, which, when executed by a

processor, cause a receiver station to:

        read a packet description for at least one packet received from a network

and placed into a queue, the packet description being based on a property

identified for the at least one packet, wherein the property is an acknowledgment

packet, and

determine the order for processing the at least one packet based, at least in part, on the packet description.

24.   (Original) The computer accessible medium of claim 23, further including additional sequences of executable instructions, which, when executed by the processor further cause the receiver station to process the at least one packet in the determined order for processing.

25.   (Cancelled) The computer accessible medium of claim 23, wherein the property is an acknowledgment packet.

26.   (Currently Amended) A method of controlling the order of processing packets, the method comprising:

receiving a stream of packets from a network;

identifying an acknowledgment property packet, the acknowledgment packet having a pre-designated priority value;

associating a high priority level to the acknowledgement packet, wherein associating the high priority level to the acknowledgement packet includes disregarding the pre-designated priority value;

placing the acknowledgement packet into a priority queue;

Application No. 9/891,574

Response to Office Action of December 15, 2004

Atty. Docket No. 042390.P11397
Examiner Chang, Richard
TC/A.U. 2663

placing the other packets into at least one other queue;

removing the acknowledgement packet from the priority queue before removing the other packets from the at least one other queue; and

processing the acknowledgement packet before processing the other packets.

27. (Original) The method of claim 26, wherein the at least one packet has a pre-designated priority value and wherein the associating the priority level includes disregarding the pre-designated priority value.

28. (Original) The method of claim 26, wherein the at least one packet has more than one property with different priority values and the priority level is a select one of the priority values.

29. (Original) The method of claim 26, wherein the identifying of the property is by determining the packet size.

Application No. 9/891,574

Response to Office Action of December 15, 2004

Atty. Docket No. 042390.P11397
Examiner Chang, Richard
TC/A.U. 2663

30.   (Original) The method of claim 26, performed by a final destination receiver

station on the network.